	4 /	Recei	ving Rep	ort		
, D	ate: /3//3/	13	Batcl	n No: MA	17818	*
S	upplier: JHYS	SENT	Dart	P/O:	2040	
Packing Slip: Invoice: Receipt: Discrepancies	Yes No Yes No Cash Cr	W SI	elease Note A laybill Attache hipment Com C6 Inspection lork Order	ed: Ye	es V No	
Part Number	Description	antity dered	Quantity Received	Quantity Returned	Quantity Short	Comments
M 7075T	63700 62	27	0	0	22	
M7078 1	63/2000	ne 60	U	0	Ço	
				::- h:	OK) Laval	15
Production/Ad Date Received/Cos Initial	13/12/23	Initials	of receiver (it snipment	OK) Level	

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

All amounts are calculated in domestic currency.

Purchase Order Receipt Listing

Monday, December 23, 2013 11:52:04 AM

All Vendors PO ID PO22425 Receipt Dates from 12/23/2013 to 12/23/2013 All Line Item Types All Item ID/GL/WOs All Rec. Employees All Currencies Grouped by Vendor ID

MRB Qty/ Book Amt MRB Reject Qty	0 \$122.03	0 \$19.16	0 \$28.02	0 \$55.74	0 \$28.25	0 \$62.71
Inspected Qty/ MRB Rejected Qty MRB (PO U/M)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Cost Per Unit/ Recv Value	\$10.17	\$0.80	\$2.34	\$4.65	\$0.28	\$5.23
Recv Qty (PO U/M)	12.0000	24.0000	12.0000	12.0000	100.0000	12.0000
Required Date Recv Required Qty Date/ Recv Emp	12/27/2013 12/23/2013 12.0000 DESJ02	12/27/2013 12/23/2013 24.0000 DESJ02	12/27/2013 12/23/2013 12.0000 DESJ02	12/27/2013 12/23/2013 12.0000 DESJ02	12/27/2013 12/23/2013 100.0000 DES102	12/27/2013 12/23/2013 12.0000 DESJ02
Reference/ PO U/M / Re Description/ Stock U/M R Cert Std	OP001 Thyssenkrupp Materials CA Ltd M304R1.500 f 304 round bar 1.500 f m127818	M6061T6B0.375X01. f 000 6061T6 BAR .375 x f 1.00 m127818	M6061T6B0.750X01. f 500 6061-T6 Bar .750 X f 1.50 m127818	M6061T6B0.750X03. f 000 6061-T6 Bar .750 x f 3.00 m127818	M6061T6B00750X00 f .125 6061-T6 Bar .750 x f .125 m127818	M6061T6B2.000X01. f 250 6061-T6 Bar 2.00 x f 1.25
Line Project ID 1 Nbr/ Insp Req	VC-CC	S	4 Z	s ^o Z	9 °N	Z _o
Purchase Order ID/ Curr Type	endorID/Vendor Name PO22425 1 CAD No					

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Book Amt	172.0000	0.0000	0.0000	\$315.92	0.0000
MRB Qty/ MRB Reject Qty	uantity:) U/M):	uantity:	t Value:	uantity:
Cost Per Unit/ Inspected Qty/ MRB Qty/ Reev Value Rejected Qty MRB Reject (PO U/M) Qty	Total Received Quantity:	'otal Qty to Inspect (PO U/M):	Total Reject Quantity:	Total Receipt Value:	Fotal Balance Due Quantity:
Cost Per Unit/ Reev Value		Total			Tot
Reev Qty (PO U/M)					
Reev Date/ Reev Emp					
Required Date Required Qty					
PO U/M / Stock U/M					
Reference/ Description/ Cert Std					
Project ID Reference/ Description Cert Std					

Line Nbr/ Insp Req

Purchase Order ID/ Curr Type

Purchase Order Receipt Listing

BILL OF L Ship From: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ONTARIO L4K 5C6 Tel: 905 669 9444 Fax: 905-738-9033

Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Tel: 613-632-9577 Fax: 613-632-1053

OF LADING No: PEC 855986
Ship Date 20Dec13 at 12:30 From PFW
Probill
Via VIM TRANSFER
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

	=======================================
B I L L O F 1) Our Order PEC-636504- 1 Your PO STAINLESS STEEL ROUND BAR 304L 1.50" DIA X 144.0000" Heat Number Tag No. 247039	MTR 4
2) Our Order PEC-636504- 2 Your PO ALUMINUM FLAT BAR 6061-T6511 .375" x 1.00" X 144.0000" Heat Number Tag No 21359 247041	MIK
3) Our Order PEC-636504- 3 Your PO ALUMINUM FLAT BAR 6061-T6511 .750" X 1.50" X 144.0000" Heat Number Tag No 21511 247042	# 22425 Quantity PCS MTR Wt LBS 16
4) Our Order PEC-636504- 4 Your PO ALUMINUM FLAT BAR 6061-T6511 .750" x 3.00" X 144.0000" Heat Number Tag No Z00219063 247043	# 22425 Quantity PCSMTR Wt LBS 32
5) Our Order PEC-636504- 5 Your PO ALUMINUM FLAT BAR 6061-T6511 .125" x .750" X 240.0000" Heat Number Tag No 21256 247044	MTP

TOUTES ERREURS ET/OU MARCHANDISES MANQUÂNTES DOIVENT ÊTRE RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT. MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

DATE

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

Page: 1Continued

THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ONTARIO L4K 5C6 Tel: 905 669 9444 Fax: 905-738-9033

Ship To: (1)DART AEROSPACE

Ship From:

BILL OF LADING
Ship Date 20Dec13 at 12:30 From PFW Probill Via VIM TRANSFER CONCORD FOB PREPAID Frt Route 0- 0 Manifest Trailer Vhcle Slp STAN IVERS (905-532-1350) Sold To: (20115) DART AEROSPACE

BILL OF LADING

6) Our Order PEC-636504- 6 Your PO # 22425 ALUMINUM FLAT BAR 6061-T6511 1.250" x 2.00" X 144.0000" PCS Wt LBS Quantity Heat Number Tag No 12 FT 35 . 1 201324784) 247045 _____ Tags PCS LBS 6 180 11 TOTAL:

*** Chemical Analysis ***

Heat Number 201324784

21256

21359

21511

H7D2 Z00219063

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

TOTAL 2 BDLS GW. 225 LBS

****** CLOSED FOR THE HOLIDAYS ******* ON DEC. 25TH & 26TH, 31ST & JAN. 1ST. WE ARE OPENED FOR BUSINESS ON DEC. 24, 27 & 30. HAVE A HAPPY HOLIDAY SEASON! *CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA CONCORD, ONT.* *** 9:00 AM TO 4:00 PM *** CONCORD, ONT.* **** TEL. 800-926-2600 ****

Page: 2Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE RAPPORTÉES IMMÉDIATEMENT. ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.

MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

DATE

THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ONTARIO L4K 5C6 Tel: 905 669 9444 Fax: 905-738-9033

Ship To: 1) DART AEROSPACE

Ship From:

PEC 855986 BILL OF LADING No: Ship Date 20Dec13 at 12:30 From PFW Probill VIM TRANSFER Via CONCORD FOB PREPAID Frt 0- 0 Manifest Route Trailer Vhcle Slp STAN IVERS (905-532-1350) Sold To: (20115) DART AEROSPACE

BILL OF LADING **************** WE STOCK STAINLESS STEEL * PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *************** ***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE ADDED TO EVERY ORDER. ***

Page: 3 Last

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE RAPPORTÉES IMMÉDIATEMENT. ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT. MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

DATE

STAINLESS STEEL ROUND BAR 304L 1.50" DIA X 144.0000"

PO/Rel 22425

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

Certificate of Mill Test Results

BL PEC-855986-001

20Dec13



METALLURGICAL TEST REPORT

NORTH AMERICAN STAINLESS 6870 HIGHWAY 42 EAST GHENT, KY 41045

Customer: Certificate: 881036 6870 HICHWAY 42 EAST

007206 001 Mail To:

CONCORD, ON L4K5C6 2821 LANGSTAFF ROAD THYSSENKRUPP MATERIALS

2821 LANGSTAFF ROAD Ship To:

THYSSENKRUPP MATERIALS CONCORD, ON L4K5C6

Finish: ST Steel: Date: 304/304 10/17/2013 Page:

NAS Order: IN 0177356 01

13/12 REMARKS: IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION 2011/65/EU.ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG COMPLIES W/REQUIREMENTS OF DFAR 252.225-7014A-1 BU DIRECTIVE

ASTM A276,410, ASTM A479/11, ASTM A182/10 CHEM ONLY,

ASTM A193/10A-ASME SA193/10 CL 1 GR B8(EXC PAR 7.2) SOLUTION ANNEAL TEMP 1900F MIN, ASTM A320/08 CL 1 GR B8

AMS 5639H, AMS 5647J, AMS QQS-763B, QQS-763F ASME SA479/10a, ASME SA182/10 CHEM ONLY UNS 30400/30403, EN 10204 3.1, ASTM A484/11

Round Bar, Annealed, Smooth Turned, Cold Finished

NACE MR0175 (MID RADIUS ONLY)

PRODUCT DESCRIPTION:

PEC252845

Corrosion: ASTM A262-10 Prac A/E OK

BF5288 8 Product Skid # Diameter Size Weight ----Length-----Mark Pieces Commodity Code

CHEMIC AL ANALY Ø SH CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Chemical Analysis per ASTM A751/08

	7	H	H
		H7D2	HEAT
		SD	CM
.0235	67°	.0215	
.2285	% SI %		C % CO %
		.1525 18.0420	CR %
			CU %
		.4385 1.3975	CU % MN % MO %
			MO %
		.3150 .0724	N %
		8.5600	% IIN
		.0350	**

MEC Ħ AN Ω AL М Ħ 40 Ħ RT Н A

BF5288 8	Product Id
RL	1 d
RL 161.00 45.35 89.28 75.54 43.25	HB No.
45.35	.2YS
89.28	DTS
75.54	RA
43,25	Elng % 4D

of the test methods used, the material meets the specifications stated. These results relate only to the items NA3 hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical Dept. Mgr.

China a 10,47,40013

Doc No. 169787

Indexed 18Oct13 by slssup1

ALUMINUM FLAT BAR 6061-T6511 .750" X 1.50" X 144,0000" PART NO.

PO/Rel 22425

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

Signed by

BL PEC-855986-003

Pg 1/1 20Dec13



411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4 TEL: (416)745-4444 FAX:(416)745-0925 1-800-668-7210 http://www.extrudex.com

MILL TEST ASTM B221-12

THYSSENKRUPP MATERIALS, NA THYSSENKRUPP MATERIALS, NA

BILL TO

CUSTOMER PO Cert Code: 0.72 ALLOY DIE NUMBER ഗ 4969 TEMPER SALESMAN DATE OF SHIPMENT 8/12/2013 EXTRUDEX ORDER NO.

CUSTOMER PART NUMBER PEC-250379 1-750-1500 PART DESCRIPTION T6511

FORBES DODWELL CERTIFICATION 159998 — MILL TEST ASTM B221-12 MADE IN CANADA

MANIFEST NO

Alloy

Mechanical Properties

Lot

750"x1.5" FE

Chemical Composition

Cast Momber 21511

6061

0.58

Fe

2

M

Mg 0.82

0.043 10

Z

Zn

Ga

0.00 0.0090 0.014

0.00

0.00 1

0.00 JW

0.209

0.196 0.058

A.11

6061

A 11

Aug/08/13 Test Date

Ultimate Tensile Strength (KSI)

45.0

(KSI)

Yield Strength

Elongation

Percent

16.00

Hardness

Conductivity

86.1, 86.5, 86.7

0.00 0.00 0 0.00 <u>Sn</u> 0.00 15 0.00 Remainder 6 2 Other

specifications. We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper

Quality Control Manager David Natale

1 - CUSTOMER COPY

Doc No. 164772

Indexed 13Aug13 by slssup1

MILL TEST ASTM B221-12

ALUMINUM FLAT BAR 6061-T6511 .125" x .750" X 240.0000"

PO/Rel 22425

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

Certificate of Mill Test Results

BL PEC-855986-005

Pg 1/1



411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4 TEL: (416)745-4444 FAX:(416)745-0925 1-800-668-7210 http://www.extrudex.com

MILL TEST ASTM B221-12

8/11/10

Mechanical Properties THYSSENKRUPP MATERIALS, NA THYSSENKRUPP MATERIALS, NA .125"x.750" FB Tot

> CUSTOMER PO Cert Code: CUSTOMER PART NUMBER PEC-249990 0.18 ALLOY PART DESCRIPTION 6061 S

1-125-750

DIE NUMBER 4642 TEMPER

DATE OF SHIPMENT

T6511

8/12/2013

FORBES DODWELL

CERTIFICATION MADE IN CANADA

EXTRUDEX ORDER NO.

MANIFEST NO.

159543 —

MILL TEST AST/M B221-12

Hardness Conductivity

Chemical Composition

A.11

Cast Number 21256 6061

0.56

41.8

36.7

12.80

86.3,87.1,86.6

Ultimate Tensile Strength (KSI)

Yield Strength (KSI)

Elongation

Percent

6061

<u>Fe</u> 0.207 0.186 0.065 Test Date 0.82

Aug/03/13 0.045

0.00 170

0.008 0.008 <u>Ga</u> 0.00 <

B.00

0.00

. 0.00

15

60

0.00 0.00 0.00 Remainder 0.00

≥

Other

We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper

specifications.

David Natale

Quality Control Manager

1 - CUSTOMER COPY

Doc No. 164762 Indexed 13Aug13 by slssup1

MILL TEST ASTM B221-12

375" x 1.00" X 144.0000" PART NO.

PO/Rel 22425

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

Certificate of Mill Test Results BL PEC-855986-002

20Dec13 Pg 1/1



411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4 TEL: (416)745-4444 FAX:(416)745-0925 1-800-668-7210 http://www.extrudex.com

MILL TEST ASTM B221-12

.375"x1" FB BILL TO THYSSENKRUPP MATERIALS, NA THYSSENKRUPP MATERIALS, NA Cart Code: CUSTOMER PART NUMBER CUSTOMER PO PEC-250317 1-375-1000 0.22 DIE NUMBER PART DESCRIPTION TEMPER SALESMAN DATE OF SHIPMENT FORBES DODWELL 8/12/2013 CERTIFICATION EXTRUDEX ORDER NO. 159957 — MADE IN CANADA

MANIFEST NO

MILL TEST ASTM/B221-12

87.1,87.9,87.5

0.00 Z 0.00 0 0.00 Pb 0.00 Sn 0.00 13 0.00 Remainder 0.00

0

 \geq

Other

Chemical Composition

Cast Number 21359

6061

<u>Si</u>

<u>Fe</u> 0.215

0.20

Mn 0.071

Mg 0.82

<u>Cr</u>

0.00 Z

Zn II 0.015 0.013

Ga 0.00

0.00

0.00 loo

A.11

MecKanical Properties

Lot

Alloy

Test Date

Ultimate Tensile Strength (KSI)

Yield Strength

(KSI) 38.6

> Elongation Percent

> > Conductivity

15.20

6061

Aug/01/13

41.9

We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper

specifications.

David Natale

Quality Control Manager 1 - CUSTOMER COPY

Doc No. 164751 Indexed 13Aug13 by slssup1

MILL TEST ASTM B221-12

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511 .750" x 3.00" X 144.0000" PART NO. PO/Rel 22425

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-855986-004

20Dec13

Signed by:





CERTIFIED TEST REPORT

http://Online.KaiserAluminum.com

KAISER ALUMINUM FABRICATED PRODUCTS, LLC 5205 KAISER DRIVE KAI AMAZOO MI 49048

CUSTOMER PO NUMBER:	CUS	FOMER PART NUMBER:	P	RODUCT DESCRIPTION		
PEC-253393-2	ALF	ALREC00350		750 X 3.000 SC R		
KAISER ORDER NUMBER: LIN	E ITEM:	SHIP DATE:	K	AISER LOT NUMBER.	ALLOY:	TEMPER:
654684 00	2	11/05/2013	Z	200219063	6061	T6511
00 100 1	ANTITY:	B/L NUMBER:	0	AM/DAF/THKHS.	WIDTH:	LENGTH:
1524.000 LB 48	.000 PCS	607497				12.000 FT
SHIP TO.			S	OLD TO		
THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			2	THYSSENKRUPP 1821 LANGSTAFF CONCORD, ON L		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARD	DNESS	CONDUCT.	BEND
	0001	1	51,6	48.2	15.3	RE	94	N/A	N/A
Z00219063 Z00219063	0001	2	51.7	48.2	12.1	RE	93	N/A	N/A
Z00219063	0001	3	51.1	47.7	17.0	RE	93	N/A	N/A
Z00219063	0301	4	48.5	45.0	15.2	RE	94	N/A	N/A
200219063	0001	5	49.2	45.3	14.5	RE	90	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum										NA	NA	0.05	0.15
Minimum	0.00	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
103098	.71	.23	.24	.09	.92	.10	.02	.02	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM-B221-13 STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 97 (REAF 2012) UNS#A96061 (T8511 also conforms to T6-not applicable to other tempers;

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY OF ITS COMPOUNDS ARE UTILITZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Timothy K. Fargo, Quality & Technology Manager

Fores Sely

Plant Serial: 00112126 Kaiser Order Number: 654684

03/12/27

Line Item: 002

Page 1 of 1

ALUMINUM FLAT BAR 6061-T6511 1.250" x 2.00" X 144,0000" PART NO. DART AEROSPACE

PO/Rel 22425

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

CERTIFIED INSPECTION REPORT AND TEST RESULTS

FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER

192177

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Certificate of Mill Test Results

BL PEC-855986-006

Pg 1/1 20Dec13



Service Center Metals

Prince George, VA 23875 5850 Quality Way

MANIFEST NUMBER

CUSTOMER PO

CUSTOMER PART NUMBER PEC-254216

ThyssenKrupp Materials NA, Toronto

Quantity Certified

2,104 lbs

59 pcs

ThyssenKrupp Materials NA

SCM extrusions are manufactured in the USA.

description, and that samples representative of the material met the composition limits and had the mechanical properties shown.

210507

MRB1792

DIE NUMBER

DESCRIPTION KLOY TEMPER 6061-T65/11

MR61792

SALESPERSON David Schroeder

DATE OF SHIPMENT 12/12/2013

CERTIFICATION

ASTM-B221-13 StencilCont

AMS-QQA-200/8 - 1997

revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification MORB 1.250x2,000

also meet the requirements of 6061-T6 Items produced and certified as 6061-T6511

6 (201324784	mecnanical Properties Tests Lot No.
12/7/13	Test Date
min max	Ultimate Tensile
47.60 50.40	Strength (KSI)
min max	Yield Strength
43.70 46.20	(KSI)
min max	Percent
16.45 17.15	Elongation

Chemical (
Composition for Alum
for Aluminum A
Alloy 6061

112631	Cast Number
6061	Alloy
0.77	<u> (3)</u>
0.38	Fe
0.34	Cu
0.09	Mn
0.92	Mg
0.10	<u> C</u>
0.06	Zn
0.02	H
97.32	<u>A</u> L
0.05	Others Each To
0.15	Total
United States of America	Melt Source:

Calvin I Wingins Director of Quality & Tochnical Service

Print Date: 12/12/2013

PO/Rel 22425

Certificate of Mill Test Results

Signed by:

BL PEC-855986-001

20Dec13 Pg 1/1

DART AEROSPACE	STAINLESS STEEL ROUND BAR 304L 1.50" DIA X 144,0000"	PART NO,

We certify that this is a time copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

NORTH AMERICAN STAINLESS 6870 HIGHWAY 42 EAST GHENT, KY 41045

METALLURGICAL TEST REPORT Ship To:

THYSSEDICRUPP MATERIALS

2821 LANGSTAFF ROAD CONCORD. ON 14K5C6

THISSENKEDPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON LAKSC6

Mail Tor

Certificate: 881035 1

6870 HIGHWAY 42 EAST

NAS

007206 001

Pustomer:

Date: 10/17/2013

Page:

Finish: ST

Steel: 304/3041

Corrogion: ASTM A362-10 Prac A/E OK

REMARKS NAS Order: IN 0177355 01 DESCRIPTION: PEC252845 PRODUCT Your Order:

ASTM A276/10, ASTM A479/11, ASTM A182/10 CHEM ONLY,

ASME SA479/10a, ASME SA182/10 CHEN ONLY

Round Bar, Annealed, Smooth Turned, Cold Finished

NACE MR0175(MID RADIUS ONLY)

UNS 30400/30403, EN 10204 3.1, ASTM A484/11

IN USA FREE FROM MERCURY AND LOW MEASTING ALLOY CONTRACTION COMPLIES W/REQUIREMENTS OF DFAR 252,225-7014A-1 8U DIRECTIVE 2011/65/EU, ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MTG

AMS 5639H, AMS 5647J, AMS QOS-763E, QOS-763F SCIUTION ANNEAL TEMP 1900F MIN, ASTM A320/08 CL 1 GR B8 ASTM A193/10A-ASIM SA193/10 CL 1 GR B8(EXC PAR 7.2)

Pleces Commodity Code 144,00 -Length-1,534 Weight 1.5000 Skid # Diameter Product Id BF5288

Size

Mark

ES(Spain) US(United States) ZA(South Africa) JP(Japan) CM(Country of Melt) ĽΩ ANALYSI HEMICAL

Chemical Analysis per ASTM A751/08

0350 8.5600 N N N .0724 % N .3150 MO % 1,3975 NN % .4385 28% 18.0420 ð, CR 1525 .2285 Ŕ HS 8 .0215 0235 40 (C) t Š SD H7D2 HEAT

RTIE PROPE MECHANICAL

Product 1d	4 0 0 E	No.	24S 481	TEI . REI . 89.28	No. KET KET % % 4D 161.00 45.35 89.28 75.54 43.25	Eing % 4D % 43.25		
	i i							

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Doc No. 169787 Indexed 180ct13 by sissup.1

10,43,4301

Contraction of the second

Dept. Mgr. Technical

ALUMINUM FLAT BAR 6061-T6511 .750" X 1.50" X 144.0000" PART NO. DART AEROSPACE

PO/Rel 22:125

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

20Dec13 Pg 1/1

Certificate of Mill Test Results BL PEC-855986-003 Signed by:

TY TO THE PROPERTY OF THE PROP	TEL: (416)745-4444 FAX:(416)745-0925 1-800-668-7210 411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA LAL 8N4 http://www.extrudex.com
MILL TEST ASTM B221-12 MILT TO THYSSENKRUPP MATERIALS, NA SO DESCRIPTION TO SO DESCRIPTION TO SO STATEMENT OF MATERIALS, NA SO DESCRIPTION TO SO NATIONAL OF MATERIALS, NA TO SO NATIONAL OF MATERIAL OF MATERIALS, NA TO SO NATIONAL OF MATERIAL OF MA	2 CONTINUES OF THE OFFICE OF SHIPMENT CONSTONERS TO THE OFFICE
Mechanical Properties Lot Alloy	Test Date Ultimate Tensile Yield Strength Percent Hardness Conductivity Strength (KSI) Elangation
A.11 6051	Aug/08/13 45.0 41.4 16.00 86.1, 86.5, 86.7
Chemical Composition Cast Number A.11 2(511 6081	Si Fe Cu Mn Mg Cr Ni Zn Ti G8 V B Zr Bi Pb Sn Sr Co Al Qther 0.56 0.209 0.209 0.009 0.00 0.000 0.001 0.000 0.00 0.0
	We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper specifications.
David Natale Quality Control Manager	

MILL TEST ASTM 8221-12

1 - CUSTOMER COPY
Doc No. 164772 Indexed 13Aug13 by sissupi

DART AEROSPACE ALUMINUM FLAT BAR 6061-76511 .125" x .750" X 240.0000" PART NO.

PO/Rel 22425

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

Certificate of Mill Test Results BL PEC-855986-005

20Dec13 Pg 1/1

MILL TEST ASTM B221-12

Doc No. 164762 Indexed 13Aug13 by slssupl

1 - CUSTOMER COPY

ALUMINUM FLAT BAR 6061-T6511 .375" x 1.00" X 144.0000" PART NO. DART AEROSPACE

PO/Rel 22425

We certify that this is a time copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results Signed by:

BL PEC-855986-002

Co Al Other 0.00 Remainder 0.00 292782 MANIFEST NO. TEL: (416)745-4444 FAX: (416)745-0925 1-800-668-7210 http://www.extrudex.com 411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4 We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper Conductivity MADE IN CANADA MILL TEST ASTM B221-12 EXTRUDEX ORDER NO. 일 6 S 69:0 87 1,87,9,87,5 Hardness 원 ⁸ 159957 CERTIFICATIÔN 回 0000 0000 Zr 0.00 Elongation 15.20 Percent FORBES DODWELL O.00 8/12/2013 ≥ 0.00 Yield Strength DATE OF SHIPMENT 38.6 (KSI) <u>Ga</u> 0.00 SALESMAN MILL TEST ASTM B221-12 11 0.013 Ultimate Tensile T6511 0.075 TEMPER Strength (KSI) PART DESCRIPTION 41.9 ₩ 2000 DIENUMBER 6061 SALLOY Or 0.053 Test Date Aug/01/13 0.22 Ma 0 82 PEC-250317 1-375-1000 CUSTOMER PART NUMBER 0.071 CUSTOMER PO 0.20 specifications Cert Cade: FB 0.215 Si 0.57 III ALUMINIM TEST ASTM B221-12 THYSSENKRUPP MATERIALS, NA THYSSENKRUPP MATERIALS, NA 6061 Alloy 6061 Chemical Composition Mechanical Properties 21359 Cast Number 1 - CUSTOMER COPY Quality Control Manager IN X David Natale 375"x1" FB A.11 o MILL A.11 BILL 70

Doc No. 164751 Indexed L3Aug13 hy sissupl

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511 .750" x 3.00" X 144.0000" PART NO.

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-S55986-004

20Dec13

Pg 1/1



CERTIFIED TEST REPORT

http://Online.KajserAluminum.com

KAISER ALUMINUM FABRICATED PRODUCTS, LLC 5205 KAISER DRIVE

CUSTOMER PO NUMBE	R:	CUSTOME	R PART NUMBER:	PRODUCT DESCRIPTION	Ľ,				
PEC-253393-2		ALREC	00350	.750 X 3.000 SC RECT BAR					
KAISER ORDER NUMBE	R: LINE ITEM;	, ,	SHIP DATE:	KAISER LOT NUMBER.	ALLOY:	TEMPER:			
654684	002		11/05/2013	Z00219063	6061	T6511			
WEIGHT SHIPPED:	QUANTITY:		B/L NUMBER:	DIAM/DAF/THKNS:	WIDTH:	LENGTH:			
1524.000 LB	48.000 P	cs	607497			12.000 FT			

THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA

Actual Physical Properties

			, 1000	Aut a 115 min	,				
REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARI	DNESS	CONDUCT.	BEND
Z00219063 Z00219063	0001 0001	1 2	51.6 51.7	48.2 45.2	15.3 12.1	RE RE	94 93 93	N/A N/A	A\A A\A
200219063 200219063 200219063	0001 0001 0001	3 4 5	51.1 46.5 49.2	47.7 45.0 45.3	17.0 15.2 14.5	re re	94 90	N/A N/A	N/A N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS Si Fe Cu Mn Mg Cr Zn Ti Pb Bi Zr Ea Tot			~	11011111			,								
	TATEO		Fo	C13	Mn	Mor	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot	
Maximum 0.80 0.70 0.40 0.15 1.20 0.35 0.25 0.15 NA NA NA 0.05 0.15 Minimum 0.40 0.00 0.15 0.00 0.80 0.04 0.00 0.00 NA NA NA 0.00 0.00 103098 .71 .23 .24 .09 .92 .10 .02 .02 .00 .00 .00 .00 .01 .03	Maximun	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA NA	T-4"-F	P.4 * 7	0 1 0 1		

Applicable Requirements:

ASTM-B221-13 STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 97(REAF 2012) UNS#A96061 (T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY OF ITS COMPOUNDS ARE UTILITZED BY KAISER ALOMINUM IN THE MANUFACTURE OF THIS MATERIAL.

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Timothy K. Fargo, Quality & Technology Manager



Plant Serial: 00112126 Kaiser Order Number: 654684

Line Item: 002

Page 1 of 1

PO/Rel 22425

Certificate of Mill Test Results

BL PEC-855986-006

ALUMINUM FLAT BAR 6061-T6511 1.250" x 2.00" X 144.0000" Doc No. 174430 We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the meterial met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA BILL TO mechanical Properties ThyssenKrupp Materials NA Chemical Composition for Aluminum Alloy 6061 ThyssenKrupp Materials NA, Toronto 112631 Cast Number Quantity Certified 2,104 lbs Indexed 18Dec13 by sissup1 O Car Do. 201324784 Lot No. Service Center Metals Alloy 6061 Prince George, VA 23875 5850 Quality Way 0.77 59 pcs (3) 0.38 Fe CUSTOMER PART NUMBER CUSYOMER PO MANIFEST NUMBER PEC-254218 0.34 MRB1792 5 We certify that this is a true copy of the teport fundshed by the producer of the metal, or data resulting from tests made in approved labs. N N 0.09 CERTIFIED INSPECTION REPORT AND TEST RESULTS Ma 0.92 OIE NUMBER MQRB 1.250x2.000 DESCRIPTION ALLOY / TEMPER 6061-T6511 MRB1792 Calvin_l_Wingins_Director of Quality_& Technical Send 0.10 10 Test Date FOR EXTRUDED PRODUCTS 12/7/13 0 06 N SALESPERSON DATE OF SHIPMENT 0.02 David Schroeder 12/12/2013 min 47.60 Ultimate Tensile Strength (KSI) 2 97 32 Each max 50.40 Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6 ASTM-B221-13 StencilCont CERTIFICATION OUR ORDER NUMBER 0.05 Others Total AMS-QQA-200/8 - 1997 192177 min 43.70 0.15 Yreid Strength (KSI) max Print Date: 12/12/2013 46.20 MEM United States of America Melt Source. min 16.45 Ç, Elongation Percent max 17.15 20Dec13 Pg 1/1



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO22425

Purchase Order Date 12/18/2013 PO Print Date 12/19/2013

Page Number 1 of 4

Order From:

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A" TORONTO, ON M5W 5V8 CA

DART AEROSPACE LTD Ship To:

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Contact Name

Vendor Phone

905 669 9444

Buyer

Chantal Lavoie

Customer POID Customer Tax #

10127-2607

Ship To Contact Ship To Phone

VENDOR'S TRUCK

Terms Currency Net 30 CAD

FOB

FCA - (Free Carrier)

Ship Via: Ship Acct:

Reference Line Nbr Vendor Part Number **Line Comments Delivery Comments**

Req Date/ CD Description/ Taxable Mfg ID **Promise Date**

Req Qty/ Unit of Measure

Extended Price

M304R1.500

304 round bar 1.500

12/27/2013

Yes 12/27/2013

12.00

\$10.80

\$129.60

MATERIAL: AISI 304/316 SS ROUND BAR AS PER

ASTM A276

NOTE: 303 NOT ACCEPTABLE

Line Total:

\$129.60

M6061T6B0.375X01.000

6061T6 BAR .375 x 1.00

12/27/2013

Yes 12/27/2013

24.00

\$0.85

\$20.35

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 OR 4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221

Line Total:

\$20.35

Note:



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO22425

Purchase Order Date 12/18/2013 PO Print Date 12/19/2013

Page Number 2 of 4

Order From:

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A" TORONTO, ON M5W 5V8 CA

DART AEROSPACE LTD Ship To:

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Contact Name

Vendor Phone

905 669 9444

Buyer

Chantal Lavoie

Customer POID Customer Tax #

10127-2607

Ship To Contact

Ship To Phone

VENDOR'S TRUCK

Terms Currency Net 30 CAD

FOB

FCA - (Free Carrier)

Ship Via: Ship Acct:

M6061T6B0.750X01.500

6061-T6 Bar .750 X 1.50

12/27/2013

12.00

\$2.48

\$29.76

Yes

12/27/2013

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 OR 4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221

Line Total:

\$29.76

M6061T6B0.750X03.000

6061-T6 Bar .750 x 3.00

12/27/2013

12.00

\$4.93

\$59.20

Yes 12/27/2013

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 OR 4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221

Line Total:

\$59.20

M6061T6B00750X00.125

6061-T6 Bar .750 x .125

12/27/2013

100.00

\$0.30

Yes

12/27/2013

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 OR 4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221

1/3/12/23

\$30.00

Note:



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 Tel: 613 632 9577 Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO22425

Purchase Order Date 12/18/2013 PO Print Date 12/19/2013

Page Number 3 of 4

Order From:

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A" TORONTO, ON M5W 5V8 CA

DART AEROSPACE LTD Ship To:

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Contact Name

Vendor Phone

Buyer

Chantal Lavoie

905 669 9444

Customer POID Customer Tax #

10127-2607

Ship To Contact

Ship To Phone

Terms

Net 30 CAD

Ship Via:

VENDOR'S TRUCK

Currency **FOB**

Ship Acct:

FCA - (Free Carrier)

M6061T6B2.000X01.250

6061-T6 Bar 2.00 x 1.25

12/27/2013

12.00

Yes

12/27/2013

MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 OR 4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221

Line Total:

\$30.00

\$66.60

\$5.55

Line Total:

\$66.60

M7075T6B1.250X07.000

7075-T6 BAR 1.25" X

12/27/2013

60.00

\$49.17

\$2,950.00

7.000"

f

Yes

12/27/2013

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

Line Total:

\$2,950.00

Note:

12/19/2013



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 Tel: 613 632 9577

Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO22425

Purchase Order Date 12/18/2013 PO Print Date 12/19/2013

Page Number 4 of 4

Order From:

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A" TORONTO, ON M5W 5V8 CA

DART AEROSPACE LTD Ship To:

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Contact Name

Ship To Contact

Vendor Phone

905 669 9444

Buyer

Chantal Lavoie

Customer POID Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

Ship To Phone Ship Via:

VENDOR'S TRUCK

FOB

FCA - (Free Carrier)

Ship Acct:

M7075T6B7.000X2.000

7075-T6 BAR 7.000" X

12/27/2013

27.00

\$82.57

\$2,229.36

2.000" (order in billets)

Yes

f

12/27/2013

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

NOTE: PLEASE CUT TO SIZE: 24 PCS CUT 13.375" GRAIN DIRECTION ALONG LEGHT

Line Total:

\$2,229.36

PO Total:

\$5,514.87

Note: Pricing listed above is as per contract agreement between Dart Aerospace and the respective manufacturer.

No substitution or deviation without consent.

Certificate of Conformity or Material Certification required YES

PST# 6122-5207

Change Nbr:

2

Change Date:

12/19/2013

NO